

AMENDMENTS TO THE CLAIMS

Claim 1 (currently amended) A method of fabricating an electro-optical device suitable for use in an image forming system, comprising the steps of:

- a) providing a substrate with at least one photosensor;
- b) applying a first filter layer above a the substrate;
- c) applying an inter-filter layer over at least a portion of the first filter layer; and
- d) applying a second filter layer over at least a portion of the inter-filter layer without removing the inter-filter layer.

Claim 2 (original) A method as in claim 1, further including the step of applying a base layer on the substrate before the step of applying a first filter layer.

Claim 3 (original) A method as in claim 1, further including the step of mounting the electro-optical device in an image forming system.

Claim 4 (original) A method as in claim 1, wherein the inter-filter layer is substantially colorless.

Claim 5 (original) A method as in claim 1, wherein the inter-filter layer is composed of an optically transmissive, film-forming polymer material.

Claim 6 (original) A method as in claim 1, wherein at least one of the first filter layer and the second filter layer contains a pigment.

Claim 7 (original) A method as in claim 1, wherein the step of applying an inter-filter layer includes applying the inter-filter layer on an area of the substrate not covered by the first filter layer, thereby smoothing a top surface of the electro-optical device.

Claim 8 (currently amended) A method of making an electro-optical device for image sensing, the method comprising:

- a) providing a substrate of the electro-optical device;
- b) inserting a first photosensor and a second photosensor into the substrate of the electro-optical device;
- c) applying a base layer on the substrate;
- d) covering an area of the base layer that overlies the first photosensor with a patterned first filter layer, the first filter layer preferentially allowing light having a wavelength within a first range to reach the first photosensor;
- e) applying ~~an~~ a first inter-filter layer on the first filter layer and on an area of the base layer not covered by the first filter layer, thereby smoothing a top surface of the electro-optical device; and
- f) without removing the first inter-filter layer, covering an area of the first inter-filter layer that overlies the second photosensor with a patterned second filter layer, the second filter layer preferentially allowing light having a wavelength within a second range to reach the second photosensor.

Claim 9 (currently amended) A method as in claim 8, wherein at least one of the base layer and the first inter-filter layer is colorless and translucent.

Claim 10 (currently amended) A method as in claim 8, wherein the first inter-filter

layer contains acrylic.

Claim 11 (original) A method as in claim 8, wherein at least one of the first filter layer and second filter layer contains a pigment.

Claim 12 (currently amended) A method as in claim 8, further comprising applying a second inter-filter layer on the second filter layer and on an area of the first inter-filter layer not covered by the second filter layer, thereby smoothing a second top surface of the electro-optical device.

Claim 13 (original) A method as in claim 12, wherein at least one of the base layer and the second inter-filter layer is colorless and translucent.

Claim 14 (original) A method as in claim 12, wherein the second inter-filter layer contains acrylic.

Claim 15 (original) A method as in claim 12, wherein at least one of the first filter layer and second filter layer contains a pigment.

Claim 16 (original) A method as in claim 12, wherein the electro-optical device includes a linear array chip.

Claim 17 (currently amended) An electro-optical device for image sensing, comprising:


a) a substrate;

b) a first photosensor and a second photosensor disposed within the substrate;

c) a patterned first filter layer disposed on an area of the substrate that overlies the first photosensor, the first filter layer preferentially allowing light having a wavelength within a first range to reach the first photosensor;

d) ~~an~~ a first inter-filter layer disposed permanently on the first filter layer and at least on a portion of the substrate, the first inter-filter layer smoothing a top surface of the electro-optical device; and

e) a patterned second filter layer disposed on an area of the first inter-filter layer that overlies the second photosensor, the second filter layer preferentially allowing light having a wavelength within a second range to reach the second photosensor.

 Claim 18 (currently amended) An electro-optical device as in claim ~~49~~ 17, wherein the first inter-filter layer is colorless and translucent.

Claim 19 (currently amended) An electro-optical device as in claim ~~49~~ 17, wherein the first inter-filter layer contains acrylic.

Claim 20 (currently amended) An electro-optical device as in claim ~~49~~ 17, further comprising a second inter-filter layer disposed on the patterned second filter layer and on an area of the first inter-filter layer not covered by the patterned second filter layer, thereby smoothing a second top surface of the electro-optical device.

Claim 21 (New) A method as in claim 1, wherein the step (c) of applying an inter-filter layer over at least the first filter layer includes applying the inter-filter layer over (i) a patterned first filter of the first filter layer and, (ii) one of the substrate or a base layer.

Claim 22 (New) A method as in claim 1, wherein the step (d) including without removing the inter-filter layer, includes not polishing or grinding the inter-filter layer.

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Claim 23 (New) A method as in claim 1, wherein the inter-filter layer is provided with a color to modify the incoming wavelength.

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